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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,737	12/27/2001	Sammy J. Graham	8350.1653-00	1968

7590 03/03/2004

Finnegan, Henderson, Farabow,  
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1300 I Street, N.W.  
Washington, DC 20005-3315

EXAMINER
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THOMPSON, ANNETTE M

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 03/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/026,737

Applicant(s)

GRAHAM ET AL.

Examiner

A. M. Thompson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicants' Amendment to 10/026,737 has been examined. Claims 2-8, 17 and 21 are amended. Claims 1-22 are pending.

1. Applicants' amendment is considered persuasive and obviates the existing outstanding objections and art rejections. This second non-final action on the merits introduces a new ground of rejection.

#### ***Drawings***

2. The drawings are objected to because at Figure 1, unidentified arrows input and exit from block 105. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

3. Claim 2 is objected to for the following reasons: Pursuant to claim 2, at line 4, after "routing pattern", delete "in" and insert - -for- - in lieu thereof; after "element", delete "for", insert - -in- - in lieu thereof. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Rejection of claims 1-22**

5. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Pannala et al. (Pannala), U.S. Pub. No. 2003/0079197. Pannala discloses a method and apparatus to generate a wiring harness layout.

6. Pursuant to claim 1 Pannala discloses [a] method of designing a system including an element wherein the element connects a plurality of components (¶¶ 0004 – 0006)), the method comprising establishing a system design including the plurality of components (¶ 21); generating a diagram associated with the system design (¶ 22), wherein the diagram includes the element and the plurality of components; establishing guidelines for designing the system (¶¶ 0026-29); and automatically determining a routing pattern in the system for the element based on the diagram and the guidelines (¶¶ 0021-0027).

7. Pursuant to claim 2, wherein the element includes one or more connections (¶0018), the determining a routing pattern includes the steps of determining one or more sets of one or more connections that can be bundled (¶ 0019); and determining a routing pattern in the element for each bundle (¶ 0020).

8. Pursuant to claim 3, further including receiving one or more revised guidelines for designating the structure and determining a revised routing pattern in the system for the element based on the diagram and the revised guidelines (¶ 0038).

9. Pursuant to claim 4, further including providing a drawing illustration the structure and the determined routing patterns (¶¶ 0018, 0021, 0022).

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10. Pursuant to claim 5, wherein the step of accessing guidelines for designing the system includes accessing guidelines associated with the system design (§§ 0027-0029).

11. Pursuant to claim 6, wherein accessing guidelines for designing the system includes accessing guidelines associated with the plurality of components and the elements (§§ 0027-0029).

12. Pursuant to claim 7, further including automatically providing information about the designed system (§ 0039).

13. Pursuant to claim 8, wherein automatically providing information includes the step of providing at least one of: a three dimensional drawing of the structure; a two dimensional drawing of the structure; a list of elements and components; and a bill of material associated with at least one of the system, the element, and the components (§ 0021).

14. Pursuant to claim 9, wherein the element includes a harness (§§ 0004, 0006, 0030).

15. Pursuant to claim 10, it incorporates the limitations already rejected in claim 1 and further recites a computer-readable medium including instructions for designing a structure. Pannala discloses this limitation (§§ 0039-0042) and therefore claim 10 is likewise rejected based on the reasoning of claim 1.

16. Pursuant to claims 11-18, these claims incorporate and address limitations similar if not the same as claims 2-9, respectively, and therefore claims 11-18 are likewise rejected based on the reasoning provided, supra, for claims 2-9.

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17. Pursuant to claim 19, it incorporates the limitations already rejected in claim 1 and further recites a system for designing a system including an element. Pannala discloses this limitation (¶¶ 0043-0045) and therefore claim 19 is likewise rejected based on the reasoning of claim 1.

18. Pursuant to claim 20, wherein the routing design module is software designed to work with the computer-aided design module (¶¶ 0039, 0043).

19. Pursuant to claim 21, it incorporates the limitations already rejected in claim 1 and further recites a system for designing a system including an element. Pannala discloses this limitation (¶¶ 0043-0045) and therefore claim 19 is likewise rejected based on the reasoning of claim 1.

20. Pursuant to claim 22 which recites a method of routing an element among a plurality of elements comprising establishing the plurality of components to be connected; establishing routing guidelines; and automatically determining a routing of the element to connect the plurality of components based on the routing guidelines (¶¶ 0033-0038).

### ***Conclusion***

21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892 for a complete listing.

22. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m.. If

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attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Matthew S. Smith, can be reached on (571) 272-1907.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1562 or the Customer Service Center whose telephone number is (571) 272-1750.

23. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop \_\_\_\_\_

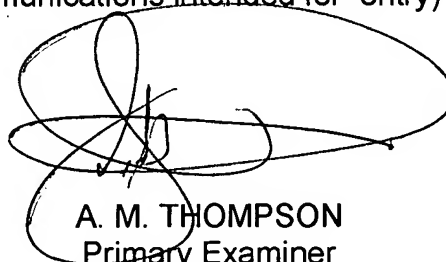
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P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)



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